

1ST AND 2ND ORDERS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH ORDERS									
<div style="display: flex; justify-content: space-between;"> <span>5</span> <span>29</span> </div> <p>AN EXACT METHOD OF DISPERSION ANALYSIS USING THE SUPER-CENTRIFUGE. V.I. Sokolov. (Zavodskaya Laboratoriya, 1948, vol 14, Apr., pp 435-440). (in Russian). Equations are developed for dispersion analysis, taking into account the variation in the speed of the different layers of the system in the supercentrifuge and the unequal speed of sedimentation of the particles.</p>																													
<div style="display: flex; justify-content: space-between;"> <div> <p>COMMON ELEMENTS</p> <p>OPEN</p> <p>MATERIALS INDEX</p> </div> <div> <p>ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION</p> </div> <div> <p>COMMON VARIANTS INDEX</p> </div> </div>																													

[illegible]

SOLOLOV, V. I.

Trubchatye sverkhtsentrifugi. Moskva, Gos. nauch.-tekhn. izd-vo khim. lit-ry, 1949.  
144, (2) p. diagrs.

Bibliography: p. (146)

Tubular supercentrifuges.

DLC: QD54.C4S6

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of  
Congress, 1953

SOKOLOV, V. I.

Tsentrifugi; protsessy tsentrifugirovaniia sovremennye konstruksii tsentrifug.  
Moskva, Mashgiz, 1950. 305 p. illus.

Bibliography: p. 302-(304)

Centrifuges; centrifuging processes and modern designs of centrifuges.

DLC: QD54.C4S62

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of  
Congress, 1953

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1649. Some consequences of Bernoulli's equation. V. I. Sokolov. J. Tech. Phys., USSR, 20, 472-5 (April, 1950) In Russian.																																																																																																																																																										
The Bernoulli-Euler equation (or "integral") is set up for a liquid in a purely centrifugal field (i.e. when gravity effects become negligible) and the results applied to the representation of the flow in an ultra-centrifuge.																																																																																																																																																										
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SOKOLOV, V. I.

Centrifuges

"Centrifugal machines." Reviewed by Prof. P. G. Romankov. Vest. mash. 31 No. 10, 1951.

9. Monthly List of Russian Accessions, Library of Congress, \_\_\_\_\_ September, 1952 ~~1953~~ Unclassified.

SOKOLOV, V.I., doktor tekhnicheskikh nauk, professor; SHKOROPAD, D.Ye.,  
inzhener; ZHIGALOV, S.F., doktor tekhnicheskikh nauk, professor,  
retsenzent; SHCHEPKIN, S.I., professor, redaktor; MODEL, B.I.,  
tekhnicheskiy redaktor.

[Automatic and continuous centrifuges] Avtomaticheskie i nepreryvno-  
deistvuyushchie tsentrifugi. Moskva, Gos. nauchno-tekhn. izd-vo ma-  
shinostroit. i sudostroit. lit-ry, 1954. 341 p. (MLBA 7:11)  
(Centrifuges)

124-57-1-1224

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 167 (USSR)

AUTHOR: Sokolov, V.I.

TITLE: Application of the Theory of Similarity to the Stress Analysis of  
Milk-separator Rotors (Primeneniye teorii podobiya k raschetu  
rotorov molochnykh separatorov na prochnost')

PERIODICAL: Tr. Mosk. 'tekhnol. in-t myas. i moloch. prom-sti, 1956,  
Nr 6, pp 122-128

ABSTRACT: Bibliographic entry

1. Rotors--Stress analysis--Bibliography

Card 1/1



SOKOLOV, V.I., professor.

Design of separator rotors based on allowable stresses and  
safe loads. Vest. mash. 36 no.6:17-20 Je '56. (MLRA 9:10)

(Separators (Machines))

*Sokolov, V.I.*

SOKOLOV, V.I., prof.

Influence of the gyroscopic effect on the critical speeds of  
shafts. Vest.mash. 37 no.12:56-58 D '57. (MIRA 10:12)  
(Shafts and shafting)  
(Mechanical movements)

AUTHOR: Sokolov, V.I., Professor

SOV/63-3-6-10/43

TITLE: Modern Centrifugal Technique (Sovremennaya tsentrifugal'naya tekhnika)

PERIODICAL: Khimicheskaya nauka i promyshlennost', 1958, Vol III, Nr 6, pp 760-776 (USSR)

ABSTRACT: Centrifuges are used for clearing liquids, separating emulsions, precipitating solids, and for filtration. Filtration consists of three stages: formation of the precipitate, removal of the liquid from the precipitate, and partial removal of the liquid kept by molecular forces. For the first stage formula (1) has been derived. The second stage is determined by the mechanics of soils [Ref. 2]. For the third stage a theoretical method of calculation has not yet been found. The empirical formula (3) is used for practical purposes. The All-Union Scientific Research Institute of Coal Dressing (VNIIU) has developed a transparent model of a centrifuge rotor (Figure 1) in which the flow of the liquid is studied. It has been shown that the speed of the liquid decreases in the direction from the axle of the rotor to its wall. This has been affirmed by photographs, photocolormetry, and radioactive isotopes. The liquid in rotors moves in trajectories which are similar to the form of the rotor. Separating centrifuges are investig-

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Modern Centrifugal Technique

SOV/63-5-6-10/43

ated in [Ref. 11]. The peripheral speed of the particles of the liquid increases from the wall to the centrum of the space between the plates. This is due to a reduction of the friction. Since the centrifugal forces are also reduced, the separation process may be destroyed. Figure 3 shows the centrifuge GOSh-12, Figure 4 GPSH-11. Super-centrifuges have been developed with an improved discharge of the precipitate. The rotor of such a machine produced by the Danish firm "Titan" is shown in Figure 8. Several other foreign types are mentioned. There are 9 diagrams and 21 references, 13 of which are Soviet, 5 German and 3 English.

Card 2/2

CERNET, M.M., doktor tekhn.nauk, prof.; DIKIS, M.Ya., doktor tekhn.nauk, prof.; LUK'YANOV, V.V., doktor tekhn.nauk, prof. [deceased]; POPOV, V.I., doktor tekhn.nauk, prof.; SOKOLOV, A.Ya., doktor tekhn.nauk, prof.; SOKOLOV, V.I., doktor tekhn.nauk, prof.; SURKOV, V.D., doktor tekhn.nauk, prof.; BARANOVSKIY, N.V., kand.tekhn.nauk, dots.; BROIDO, B.Ye., kand.tekhn.nauk, dots.; BUZYKIN, N.A., kand.tekhn.nauk, dots.; GOROSHENKO, M.K., kand.tekhn.nauk, dots.; GORTINSKIY, V.V., kand.tekhn.nauk, dots.; GREBENYUK, S.M., kand.tekhn.nauk, dots.; GUS'KOV, K.P., kand.tekhn.nauk, dots.; DEMIDOV, A.R., kand.tekhn.nauk, dots.; ZHISLIN, Ya.M., kand.tekhn.nauk, dots.; KAIRPIN, Ye.B., kand.tekhn.nauk, dots.; KOSITSYN, I.A., kand.tekhn.nauk, dots. [deceased]; GEYSHTOR, V.S., kand.tekhn.nauk, dots.; MARSHALKIN, G.A., kand.tekhn.nauk, dots.; MOLDAVSKIY, G.Ye., kand.tekhn.nauk, dots.; ODESSKIY, D.A., kand.tekhn.nauk, dots.; PELEYEV, A.I., kand.tekhn.nauk, dots.; RUB, D.M., kand.tekhn.nauk, dots.; SKOBLO, D.I., kand.tekhn.nauk, dots.; SHUVALOV, V.N., kand.tekhn.nauk, dots.; KHMEL'NITSKAYA, A.Z., red.; SOKOLOVA, I.A., tekhn. red.

[Principles of the design and construction of machinery and apparatus for the food industries] Osnovy rascheta i konstruirovaniia mashin i apparatov pishchevykh proizvodstv. Moskva, Pishchepromizdat, 1960. 741 p.

(Food industry—Equipment and supplies)

(MIRA 14:12)

SOKOLOV, V.I.; KOSHELEV, I.V.

Measurement of stresses in the rotor of the SPMF-2000 cream separator.  
Izv.vys.ucheb.zav.;pishch.tekh.no.5:118-126 '60. (MIRA 13:12)

1. Moskovskiy tekhnologicheskoy institut myasnoy i molochnoy promyshlennosti. Kafedra tekhnicheskoy mekhaniki.  
(Cream separators) (Strains and stresses)

SOKOLOV, Vasil'y Ivanovich, doktor tekhn.nauk, prof.; ZHIGALOV, S.F.,  
doktor tekhn. nauk, prof., retsenzent; MORGULIS, M.L., kand.  
tekhn. nauk, red.; KARGANOV, V.G., inzh., red.; MODEL', B.I.,  
tekhn. red.

[Modern industrial centrifuges] Sovremennye promyshlennye tsentri-  
fugi. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry,  
1961. 451 p.

(MIRA 14:9)

(Centrifuges)

L 10485-07 EMT(m)/ENP(k)/ENP(c)/ENP(t)/ETI IJP(c) JB/AS/01

ACC NR: AP6024389

SOURCE CODE: UR/0020/66/169/002/0316/0319

AUTHOR: Andrianov, V. V.; Zenkevich, V. B.; Sokolov, V. I.; Sychev,  
V. V.; Tovma, V. A.; Fedotov, L. N. 79  
73

ORG: Scientific Research Institute for High Temperatures (Nauchno-  
issledovatel'skiy institut vysokikh temperatur); Central Scientific  
Research Institute for Ferrous Metallurgy im. I. P. Bardin (Tsentral'-  
nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

TITLE: A superconducting solenoid from a three-component alloy  
generating fields of over 75,000 Oe

SOURCE: AN SSSR. Doklady, v. 169, no. 2, 1966, 316-319

TOPIC TAGS: superconductivity, strong magnetic field, niobium alloy,  
titanium alloy, zirconium containing alloy, SOLENOID

ABSTRACT: A superconducting magnet has been constructed which gen-  
erates magnetic fields of more than 75,000 oe using wire made from an  
alloy of niobium (65%), titanium (15%), and zirconium (about 9%), the  
remainder being other components selected for their metallurgical  
properties. The critical temperature of the material is 9.8-10K.  
Because of its relatively low brittleness, the 0.25-mm o.d. copper-  
plated wire could be drawn by standard methods into four-kg coils

Card 1/2

UDC: 537.312.62



L-38436-66  
ACC NR: AP6024389

representing a total length of 12 km. After cold working in vacuum or in a helium atmosphere, both types of wire were coated with a polyester varnish to add a 0.03-mm layer to the diameter. The magnet, with a 16-mm inner diameter, consisted of 3 concentric sections wound onto aluminum-alloyed formers. The inner section alone, using 17,762 turns of vacuum cold-worked wire, generated 65,000 oe; the two other sections made of 15,210 and 10,480 turns of wire cold-worked in a helium atmosphere, and wound on a common former, generated 43,500 oe. The maximum magnetic-field intensity of the magnet was 76,300 oe. Even though the solenoid has been repeatedly driven normal, no damage has been observed. Orig. art. has: 4 figures. [ZL]

SUB CODE: 20/ SUBM DATE: 16Apr66/ OTH REF: 001/ ATD PRESS: 5042

Card 2/2 *cf*

SOKOLOV, V.I., inzhener.

~~Under Review~~

Experience in operating 154 Kv air circuit breakers. Elek.sta.  
25 no.1:55-57 Ja '54. (MLRA 7:1)  
(Electric circuit breakers)

SOEDKOV, V.I., Inzhener.

Operation of an air circuit-breaker during damage to the control  
circuits. Elek.sta.28 no.7:87 J1 '57. (MLRA 10:9)  
(Hydroelectric power station)

GLAGOLEVA, T.A., kand.tekhn.nauk; VERNER, V.V., inzh.; SOKOLOV, V.I.;  
VTOROV, K.I.; BOROVY, A.I.; STROKOV, I.G.; DADIOMOV, M.S.,  
inzh.; PETROVA, V.V., red.izd-va; BOROVNEV, N.K., tekhn.red.

[Norms (SN 81-60) for the electric lighting of construction  
and assembling operations] Normy elektricheskogo osveshchenia  
stroitel'nykh i montazhnykh rabot SN 81-60. Moskva, Gos.izd-vo  
lit-ry po stroit., arkhit. i stroit.materialam, 1960. 18 p.

(MIRA 13:7)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komite po delam  
stroitel'stva. 2. Moskovskiy institut okhrany truda Vsesoyuznogo  
tsentral'nogo soveta profsoyuzov (for Glagoleva). 3. Spetsial'noye  
konstruktorsko-naladochnoye byuro Glavmosstroya (for Verner, Soko-  
lov, Vtorov, Borovoy, Strokov). 4. Leningradskiy filial instituta  
Orgenergostroy Ministerstva stroitel'stva elektrostantsiy SSSR  
(for Dadiomov).

(Electric lighting)

MAKHLIN, V.A., inzh.; SOKOLOV, V.I., inzh.

Concerning the operation of a turbogenerator without steam pressure  
in the capacity of a synchronous compensator. Elek. sta. 32 no.11:  
33-36 N '61. (MIRA 14:11)

(Electric power distribution) (Turbogenerators)  
(Interconnected electric utility systems)

SOKOLOV, V.I., inzh.

Technological and economic indices of the performance of generators  
of hydroelectric power stations in synchronous operation. Elek.  
sta. 32 no.8:45-47 Ag '61. (MIRA 14:10)  
(Turbogenerators) (Hydroelectric power stations)

KOZ'MINYKH, A.V., assistant; SOKOLOV, V.I., inzh.

Testing the system of heavy fuel preparation on the motorship "Kura."  
Biul. tekhn.-ekon. inform. Tekh. upr. Min. mor. flota 7 no.3:  
36-40 '62. (MIRA 16:5)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche (for Koz'minykh);
2. Starshiy mekhanik teplokhoda "Kura" (for Sokolov).  
(Kura (Motorship)--Fuel systems)

KOZ'MINYKH, A.V., dotsent; SOKOLOV, V.I., inzh.

Operating conditions of type MAN GV 23,5/33 diesel generators.  
Biul. tekhn.-ekon. inform. Tekhn. upr. Min. mor. flota 7 no.4:  
35-39 '62. (MIRA 16:4)

1. Odesskoye vyssheye inzhenernoye morskoye uchilishche (for  
Koz'minykh). 2. Starshiy mekhanik teplokhoda "Kura" (for  
Sokolov).

(Marine diesel engines)  
(Electric generators)



SOKOLOV, V.I., inzh. (Zaporozh'ye)

Electrical section of a 2400 Mw. steam power plant. Elektrichestvo  
no.2:88-89 F '62. (MIRA 15:2)  
(Steam power plants)

PUGACHEV, V.S.; KAZAKOV, I.Ye.; YEVLANOV, L.G.; MAL'CHIKOV, S.V.;  
MISHAKOV, A.F.; SEDOV, V.D.; SOKOLOV, V.I.; CHUL'SKIY,  
L.A., red.; BRUDNO, K.F., tekhn. red.

[Principles of automatic control] Osnovy avtomaticheskogo  
upravleniia. Moskva, Fizmatgiz, 1963. 646 p.

(MIRA 16:11)

(Automatic control)

TSIDIL'KOVSKIY, I.M.; SOKOLOV, V.I.; AKSEL'ROD, M.M.

Resistance of ~~semi~~metals in strong magnetic fields. Fiz. met. i  
metalloved. 16 no.2:318-320 Ag '63. (MIRA 16:8)

1. Institut fiziki metallov AN SSSR.  
(Antimony--Electric properties)  
(Magnetic fields)

REGULIROVANIYE, 1965, 8 no.8. Tekhn. nauk

Regulation of the parameters of the synchronous machines of  
dynamic models of electrical systems using a magnetic circuit  
excitation technique. Izv. vys. ucheb. zav.; energ. 8 no.8:  
15-22 Ag '65. (MIRA 18:9)

1. Moskovskiy ordena Lenina energeticheskiy institut.

SOKOLOV, V.I.

Problem of foreign bodies in the urinary bladder. Khirurgiia, Moskva  
no.9:70 Sept 1953. (CML 25:5)

1. Of the Surgery Division of Kalinin Oblast Hospital.

SOKOLOV, V.I.

Use of skin tube-graft for closing intestinal fistulae. Khirurgiia  
33 no.2:122 F '57. (MLRA 10:6)

1. Iz khirurgicheskogo otdeleniya Kalininskoy oblastnoy bol'nitsy  
(glavnyy vrach A.A.Sokolov, zav. khirurgicheskim otdeleniyem  
V.I.Sokolov)

(INTESTINES, fistula

surg., closure with skin tube-graft (Rus))

(SKIN TRANSPLANTATION

tube-graft in closure of intestinal fistula (Rus))

SOKOLOV, V.I.

Voluntary ejection of a foreign body from the bronchial tree.  
Nov.khir.arkh. no.2:104 Mr-Ap '58 (MIRA 11:6)

1. Kafedra khirurgii Kaliniskogo meditsinskogo instituta.  
(BRONCHI--FOREIGN BODIES)

SOKOLOV, V.I., ~~zasluzhenny~~ vrach RSFSR

True cardiospasm according to data from Kalinin Province Hospital.  
Khirurgiia 35 no.1:119-120 Ja '59. (MIRA 12:2)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. A.G. Karavanov) Kalininskogo meditsinskogo instituta (dir. - dots. A.N. Kushnev) na baze Oblastnoy bol'nitsy (glavnyy vrach - zasluzhenny vrach RSFSR A.A. Sokolov).

(CARDIOSPASM, therapy  
(Rus))



SOKOLOV, V. I.

One hundred cases of regional anesthesia using muscle relaxants  
on injury patients. Khirurgiia no.4:78-82 '62. (MIRA 15:6)

1. Iz kliniki travmatologii i ortopedii (zav. - prof. Ya. G.  
Dubrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo  
klinicheskogo instituta imeni M. F. Vladimirskogo.

(MUSCLE RELAXANTS) (LOCAL ANESTHESIA)  
(TRAUMATISM)

SOKOLOV, V.I.

Local use of muscle relaxants. Eksper. khir. i anest. no.2:  
71-74'63. (MIRA 16:7)

1. Iz kliniki travmatologii i ortopedii (zav.-prof. Ya.G.Dubrov)  
Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo  
instituta imeni M.F.Vladimirskogo (dir.- kand.med.nauk P.M.  
Leonenko)

(MUSCLE RELAXANTS)

BADAY, G. A. and SOKOLOV, V. I.

Radio v Samoletovozhdenii (Radio in aircraft-piloting), 127 pp., Moscow Mil. Publ.  
of the War Min. of the USSR, 1951.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 752 - X

BOOK

Call No.: AF657727

Authors: SOKOLOV, V. I., Maj. Gen. of Aviation, KUDRYAVTSEV, N.F.,  
GORSHKOV, M. F., KUNITSKIY, R. V., TORGMAN, A. I.

Full Title: AIRCRAFT NAVIGATION (Textbook)

Transliterated Title: Samoletovozhdeniye

PUBLISHING DATA

Originating Agency: None

Publishing House: State Publishing House of the Ministry of Defense  
of the USSR

Date: 1955

No. pp.: 367

No. of copies: Not given

Editorial Staff: Sokolov, V. I., Maj. Gen. of Aviation

PURPOSE AND EVALUATION: A textbook for aviation schools and for the  
flying personnel of the Air Force. The text is easy to follow.  
Its value is only instructional.

TEXT DATA

Coverage: The book is presented in an easily accessible form, and  
is provided with 200 diagrams and 16 tables. The instruments  
are shown mostly schematically, and are not identified by  
trademarks. A number of examples of calculation of navigational  
data are given.

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Samoletovozhdeniye

AID 752 - X  
Pages

Ch. V	Celestial Means of Aircraft Navigation Instruments, helps and charts. Tables and geographic locations of heavenly bodies.	165-224
Ch. VI	Visual Orientation Special features and rules of visual orientation in daytime and at night.	225-244
PART TWO -	PRACTICAL AIRCRAFT NAVIGATION	245-262
Ch. VII	Preparation for Flying General requirements. Choice, study, tracing and calculation of the route.	263-303
Ch. VIII	Navigation of Multiphase Aircraft General rules and special features	304-319
Ch. IX	Special Features of Navigation of Single- Seater Aircraft	320-350
Ch. X	General rules and conditions Navigation and Maneuvering in Formation Flying Turns, assembly, closing and dispersing, cooperation with the Navy. Maneuvering for arrival at a determined time.	

3/4

SOZOLOV, V.I., general-mayor aviatsii, redaktor; MEDVEDEV, I.M., gvardii  
mayor, redaktor; SOROKIN, V.V., tekhnicheskii redaktor

[Manual for the air navigator] Spravochnik aviatsionnogo shturmans.  
Moskva, Voen.izd-vo M-va obor. SSSR, 1957, 415 p. (MLA 10:10)  
(Navigation (Aeronautics))

SOKOLOV, V.I., general-mayor aviatsii v otstavke

Automatic control of aerial navigation. Vest.Vozd.Fl. no.6:91-94  
Je '61. (MIRA 14:8)

(Guidance systems (Flight))

SOKOLOV, V.I.

Duration and some characteristics of the stimulating effect of  
ginseng as compared with phenamine. Mat. k izuch. zhem'-shenia  
i lim. no.2:174-177 '55. (MLRA 9:10)

(GINSENG--PHYSIOLOGICAL EFFECT) (PHENETHYLAMINE)



USSR/Pharmacology and Toxicology. Analeptics.

V

Abs Jour: Ref Zhur-Biol., No 19, 1958, 89863.

Author : Sokolov, V.I.

Inst :

Title : Study of the Stimulating Action of Ginseng Under Conditions of Night Wakefulness.

Orig Pub: V.sb. Materialy k izuch. zhenishenya i limonika Vyp. 3, L., 1958, 24-30.

Abstract: It was demonstrated in 4 experimental subjects aged 25-29, that the extract of ginseng root (I) in doses of 2 g increases the capacity for intellectual work at night-time, improving the index of work demanding precision and sustained attention. At the same time, I does not prevent normal physiological sleep, when it is possible. It appears that, depending upon the

Card : 1/2

V-19

...conclusion of the organism, I can stimulate exclusively either the excitatory or the inhibitory process. -- S. I. Rapoport.

Card : 2/2

L 218C4-66 EMT(m)/EWP(t) IJP(c) JD/JG  
 AGC NR: AP6012189

SOURCE CODE: UR/0386/66/003/008/0329/0333

AUTHOR: Belov, K. P.; Kiryukhin, V. P.; Sokolov, V. I. 4.3

ORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet)

TITLE: Effect of small terbium impurities on the magnetostriction of yttrium iron garnet 4.1

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 3, no. 8, 1966, 329-333

TOPIC TAGS: ~~ferite~~, yttrium compound, garnet, magnetostriction, temperature dependence, saturation magnetization, terbium, polycrystal

ABSTRACT: The authors have measured the saturation magnetostriction of a polycrystalline yttrium iron garnet (YIG) sample made from the purest yttrium oxide at room temperature and found it to be negative and equal to  $-2.16 \times 10^{-8}$ , in good agreement with the published data. A plot of the longitudinal saturation magnetostriction of YIG at room temperature vs. the degree of purity of the initial yttrium oxide shows that the negative magnetostriction of YIG decreases rapidly with decreasing purity of the initial yttrium oxide. A check was made on the hypothesis that the greatest effect on the magnitude of the YIG magnetostriction is exerted

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L 21804-66  
ACC NR: AP6012189

by a terbium impurity, which follows from the fact that terbium iron garnet has at room temperature a positive magnetostriction according to their earlier measurements (ZhETF v. 48, 979, 1965) and hence increases sharply with decreasing temperature. Plots of the temperature dependences of the magnetostriction and saturation magnetization for two YIG samples of different degree of purity (99.940% and 99.996%) show that the magnetostriction becomes positive with decreasing temperature, and that the positive component of the magnetostriction exerts the greatest influence at low temperatures. Even the most insignificant terbium impurities cause not only a decrease in the magnetostriction at 300K, but also a reversal of the sign of the magnetostriction in the region of helium temperatures. On the other hand, no anomalies were observed on the temperature dependence obtained for the saturation magnetization of the same samples. This absence of correlation between the magnetization and magnetostriction of yttrium iron garnet containing a rare-earth impurity is apparently due to the fact that at low temperatures the decisive role is played by the magnetoelastic energy, causing the change in the coupling between the orbital momentum of the rare-earth ion and the intracrystalline field of the iron garnet. The detailed character of this mechanism is still unclear. It is concluded that the temperature dependence of the magnetostriction constant of YIG can serve as a qualitative indicator of the degree of purity of the

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investigated sample (or of the oxide from which it is made), the sensitivity of the magnetostriction to the terbium impurity being apparently much higher than that of the existing methods for spectral analysis of rare-earth oxides. Spectral analysis (sensitivity 0.002%) showed no terbium-oxide impurities of the purest yttrium oxide (99.996%) from which one of the samples was made, yet their presence is clearly disclosed by the anomalous variation of the temperature dependence of the YIG saturation magnetization. Orig. art. has: 2 figures.

SUB CODE: 20/ SUBM DATE: 03Mar66/ ORIG REF: 001/ OTH REF: 004

Card 3/3

Pf

SOKOLOV, V.I.; KALASHNIKOV, V.I.; GILYAYEV, V.I.

Improvement in coal mining technology and an increase in labor productivity at the Polyansko-Severnaya hydraulic mine. Ugol' 39 no.9:6-10 S 1964. (HWA 17:10)

1. Shakhta "Polyansko-Severnaya" (for Sokolov). 2. Kombinat Kuzbassugol' (for Gilyayev, Stepanov).

POPEL', S.I.; SOKOLOV, V.I.; KORFACHEV, V.G.

Effect of magnesium oxide on the physicochemical properties  
of iron silicate melts and froth stability. Sbor. nauch. trud.  
Ural. politekh. inst. no.126:24-33 '63 (MIRA 17:3)

BELOV, K.P., SOKOLOV, V.I.

Magnetostriction in rare earth ferrites-garnets at low  
temperatures. Zhur. eksp. i teor. fiz. 48 no.3:979-980  
Mr '65.

(MIRA 18:6)

1. Moskovskiy gosudarstvennyy universitet.

BELOV, K.P.; LEVITIN, R.Z.; MALEVSKAYA, L.A.; SOKOLOV, V.I.

Anomalies of the Young's modulus in rare earth ferromagnetic elements. Fiz. met. i metalloved. 17 no.4:617-619 Ap '64.

(MIRA 17:8)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.



SOKOLOV, V.I. (Pos. Solntsevo, Moskovskoy obl., Kuntsevskogo r-na, Prudnaya ul.  
d.1, kv.1.

Use of muscle relaxants in clinical orthopedics and traumatology.  
Ortop., travm.i protez. 22 no.4:42-46 Ap '61. (MIRA 14:11)

1. Iz kliniki travmatologii i ortopedii (zav. - prof. Ya.G.  
Dubrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo  
klinicheskogo instituta im. M.F. Vladimirskogo (dir. -  
zasluzh. vrach RSFSR kand.med.nauk P.M. Leonenko).  
(MUSCLE RELAXANTS) (ORTHOPEDICS)

SOKOLOV, V.I.

Use of muscle relaxants in the clinical aspects of traumatology and orthopedics during concurrent combined anesthesia. Vest.khir. no.5:81-85 '62. (MIRA 15:11)

1. Iz kliniki travmatologii i ortopedii (zav. - prof. Ya.G. Dubrov) Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta im. M.F. Vladimirovskogo (dir. - zasluzh. vrach RSFSR kand.med.nauk P.M. Leonenko).

(MUSCLE RELAXANTS) (TRAUMATISM) (ORTHOPEDIA)  
(ANESTHESIA)

ANISIMOVA, N.D., kand. tekhn. nauk, docent; SOKOLOV, V.I., inzh.;  
KHAMDI EL-SHAIR

Elimination of self-excitation in synchronous machines by  
magnetizing the stator yoke. Elektrichestvo no.1:50-53 Ja '64.  
(MIRA 1966)

1. Moskvozkiy energeticheskii institut.

URIN, V.D., inzh.; SOKOLOV, V.I., tekhn.nauk

Concerning V.I.Doroginin's article "Use of the generators of  
a hydroelectric power station as synchronous compensators."  
Elek. sta. 35 no. 4:84-88 Ap '64. (MIRA 17:7)

SOKOLOV, V.I.

Transfusion of blood saturated with molecular oxygen in an experiment. Trudy mol. nauch. sotr. MGNIKI no.1:251-259 '59  
(MIRA 16:11)

1. Iz khirurgicheskogo otdeleniya Solntsevskoy bol'nitsy Kuntsevskogo rayona Moskovskoy oblasti i pato-fiziologicheskoy laboratorii Moskovskogo oblastnogo nauchno-issledovatel'skogo klinicheskogo instituta imeni Vladimirskogo.

\*

NIKOLENKO, Leonid Konstantinovich; SOKOLOV, Vsevolod Ivanovich; GOSTEV, V.V.,  
inzhener, retsenzent; IVANOV, M.I., inzhener, retsenzent; BOGOMOLOVA,  
M.F., izdatel'skiy redaktor; ZUDAKIN, I.M., tekhnicheskiy redaktor

[The assembling of jet engines] Sborka reaktivnykh dvigatelsi.  
Moskva, Gos. izd-vo obor. promyshl., 1956. 278 p. (MLRA 9:10)  
(Airplanes--Turbojet engines)

GURFIL', Sh.S., inzh.; SOKOLOV, V.I., inzh.

The crew of the motorship "Komsomol" strives for the title of a ship of communist labor. Biul.tekh.-ekon.inform.Tekh.upr.Min.mor.flota  
5 no.4:3-12 '60. (MIRA 15:1)

1. Chernomorskoye gosudarstvennoye morskoye parokhodstvo.  
(Tank vessels)

NIKOLENKO, Leonid Konstantinovich; SOKOLOV, Vsevolod Ivanovich;  
MALOV, A.N., doktor tekhn. nauk, prof., retsenzent;  
NECHAYEV, S.I., inzh., retsenzent; KOLOSOV, M.A., red.;  
ANTONOVA, S.D., red.izd-va; NOVIK, A.Ya., tekhn. red.

[Manual for the assembly of gas-turbine engines] Posobie  
dlia slesaria-sborshchika gazoturbinnnykh dvigatelei. Moskva,  
Oborongiz, 1963. 262 p. (MIRA 17:1)



SOB LOV, V. I.

"Investigation of Stresses in the External Elements of Marine Fire-tube Boilers." Cand Tech Sci, Gor'kiy Polytechnic Inst, Gor'kiy, 1954. (RZhMekh, Apr 55)

SO: Sum. No. 704, 2 Nov 5 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

CA SOKOLOV, V.I.

13

Active manganese in the soil and its toxicity in relation to the use of physiologically acid forms of nitrogenous fertilizers. F. V. Turchin and V. I. Sokolov. *Pedrorenie* (Pedology) 1950, 650-60. - Soils treated with various sources of N ( $\text{NaNO}_3$ ,  $\text{CaCN}_2$ ,  $\text{NH}_4\text{NO}_3$ ,  $(\text{NH}_4)_2\text{SO}_4$ , and  $\text{NH}_4\text{Cl}$ ) release variable amts. of mobile Al and Mn; the  $(\text{NH}_4)_2\text{SO}_4$  treated loam soil had the highest amt. of Al and Mn, 9.40 and 8.60 mg. per 100 g. of soil. Crops grown on the  $(\text{NH}_4)_2\text{SO}_4$  plots took up large quantities of Mn. In 1944 and 1945, leaves of sugar beets had 182 and 327 mg. Mn per 100 g. of dry matter, resp. With  $\text{NaNO}_3$  the same plants had 42.1 and 15.2 mg. Mn per 100 g. of dry matter. Plants that are not sensitive to Mn and Al (rye and oats in these expts.) can withstand a high concn. of acidity. Plants sensitive to acidity are also sensitive to Mn and Al. Clover was very sensitive to Al and less to Mn; sugar beets are sensitive to Al and Mn; alfalfa is very sensitive to Mn and less to Al; millet is sensitive to Mn. Lime immobilizes all of the mobile Al, but not all of the Mn, except when enough lime is added to neutralize the hydrolytic acidity. J. S. Joffe

1937

SOKOLOV, V. I.; RUSAKOVA, A. A.

Hydrodynamics of the intrarotor flow in tubular supercentrifuges.  
Izv.vys.ucheb.zav.; pishch.tekh.no. 2:96-100 '64. (MIRA 17:5)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy  
promyshlennosti, kafedra soprotivleniya materialov i raschetov  
i konstruirovaniya.

24-4200

25360

S/124/61/000/007/037/044  
A052/A101

AUTHOR: Sokolov, V. I.

TITLE: Temperature and internal pressure stresses in cylindrical shells interconnected by rigid radial bracings

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 7, 1961, 9, abstract 7V67  
("Tr. Gor-kovsk. in-ta inzh. vodn. transp." no. 15, 1958, 95-103)

TEXT: The axially-symmetric problem is solved referring to a combined work of two coaxial thin-walled long cylinders connected by a system of continuously distributed, radial, absolutely rigid bracings, arranged in one of cross-section planes of the cylinders. The stresses due to the differences of temperatures in the inside and the outside shell and the stresses due to the internal pressure are determined. [Reviewer's note: There is no good reason for the author to assume equal the intensities of ring actions  $q$  (kg/cm) exerted by rigid bracings on both shells.

S. Sokolov

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[Abstracter's note. Complete translation]

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SOKOLOV, V. I.

Stucco

Experience in the use of compressionless nozzle in stucco work of residential buildings.

Biul. stroi. tekhn. 9, No. 18, 1952.

9. Monthly List of Russian Accessions, Library of Congress, December 1952 ~~1953~~, Uncl.

СОКЛОК

А. Я. Корнеев  
Анализ спектров амплитудной модуляции

9 июня  
(с 18 до 22 часов)

В. М. Ершов,  
О. В. Ефремов-Чубов  
Генератор импульсов типа квазирегулярный сигнал

В. П. Юрченко,  
Ю. Е. Карачин,  
Л. В. Афанасьев  
Вопросы защиты с помощью зонтирных-лучевых тру-  
бок методом фототрубки и электрофотографии.

А. А. Голуб,  
Д. А. Тарасов  
Новые системы телеметрические и радиотелеметрические

Э. А. Леонов,  
Л. А. Чумаков,  
Б. П. Шарбаков  
Применение ферритов с ППГ и полупроводников в  
системе телеметрического синхронизатора

26

10 июня  
(с 10 до 16 часов)

С. В. Гуров,  
В. Н. Сиваков

Влияние шумов на разрешающую способность в не-  
периодическом телеметрическом

М. В. Акимов  
Определение предельной разрешающей способности  
передающих телеметрических трубок по двум точкам  
структурной характеристики

М. Г. Морозов,  
М. И. Курочкин

Четырехканальные шифрованные линии для теле-  
метрических трубок.

М. О. Голуб,  
М. И. Пилип,  
В. С. Калашин,  
В. И. Морозов

Контроль качества передачи телеметрическо-  
го сигнала во время работы телеметрической

10 июня  
(с 18 до 22 часов)

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report submitted for the Conventional Meeting of the Scientific Technological Society of  
Radio Engineering and Electrical Communications in A. S. Popov (VSEI), Moscow,  
8-12 June, 1959

27150

S/187/60/000/008/002/004  
D053/D113

6.6000

AUTHORS: Gurevich, S.B., and Sokolov, V.I.

TITLE: On the effect of noise on the television image definition

PERIODICAL: Tekhnika kino i televideniya, no. 8, 1960; 21-29

TEXT: The paper was reported on at the 16th Scientific and Technical Conference dedicated to the 100th anniversary of A.S.Popov, which was convened on May 22, 1959 in Leningrad. The present work is a continuation of the authors' two former works on the effect of noise on the television (TV) image quality (Ref. 4: O vidnosti shumov v televidenii /On the noise visibility in television/, Tekhnika kino i televideniya, 1958, no. 3, 41-52; and Ref. 6: O vliyaniy shumov na razlichimost' gradatsiy yarkosti /On the effect of noise on the discrimination of tone gradations/, Tekhnika kino i televideniya, 1958, no. 4, 18-25). In this work, an effect of noise on the image resolution is evaluated. Experience shows that it is possible to considerably increase the noise and at the same time preserve a relatively high image resolution when a sufficient modulation depth is provided by

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On the effect of noise ....

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camera and picture tubes in transmitting fine details. A.M. Khalfin (Ref. 7: Osnovy televizionnoy tekhniki /Fundamentals of Television Engineering/, "Sovetskoye radio", 1955) and N.N. Krasil'nikov (Ref. 8: Vychisleniye vidinoy pomekhi v teledenii /Calculation of visible noise in television/, Tekhnika kino i teledeniya, 1959, no. 4, 27-36) reported that the resolution of the TV system is little effected by the noise if the signal-to-noise ratio ( $\Psi$ ) exceeds 3-5. The effect of noise on the image resolution was investigated using an experimental setup (Fig.1). It consisted of a skew noise generator ( $NG_2$ ), a flat noise generator ( $NG_1$ ), 2 noise level regulators ( $NR_1$  and  $NR_2$ ), 2 change-over switches ( $S_1$  and  $S_2$ ), an aperture corrector (AC), a thermistor voltmeter (TV), an oscillograph (O), a mixing unit (MU), a signal generator (SG), and a monitor (M) with a 31LK2B (31LK2B) picture tube. The observations were conducted in a darkened room by 12 TV experts. Test pattern from the signal generator (SG) was first displayed on the screen of the monitor (M) and then the noise was added. The observers had to determine the specific noise level at which the test pattern was still distinguishable. Each experiment was repeated three times and the average value was taken. Measurements were taken for different spectral

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On the effect of noise ....

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compositions of the noise. An analysis of the results obtained indicated that

$$\Psi' = \frac{\Psi}{A} ; \quad (1)$$

$$\Psi_a = \Psi'_a ; \quad (2)$$

$$\Psi_a = \frac{\Psi}{B} ; \quad (3)$$

$$\Psi'_a = \frac{A}{B} \Psi' ; \quad (4)$$

where  $\Psi$  is the signal-to-noise ratio for coarse details;  $\Psi'$  - is the signal-to-noise ratio for fine details;  $\Psi_a$  and  $\Psi'_a$  is the signal-to-noise ratio with an aperture correction for coarse and fine details, respectively; A - is the factor indicating how many times the peak-to-peak

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signal of the fine details is less than the peak-to-peak signal of the coarse details; and B is the factor indicating how many times the noise voltage increases with the introduction of aperture correction. In conclusion, the authors state that: (1) The signal-to-noise ratio ( $\psi$ ) should be from 5 to 12 for coarse details in order to avoid a decrease in the image resolution when using standard camera tubes and the current TV standard (625 lines). (2) When a full correction of aperture distortions is present, the signal-to-noise ratio ( $\psi$ ) for the standard TV broadcast can be reduced to  $\psi = 3$  to 6 without a contrast loss of fine picture details. (3) The visibility of dashes or series of points on the screen, which are nearly as wide as the picture element ( $f = 7.3$  Mc), practically does not depend on the spectral composition of noise and is determined by the ratio of the useful peak-to-peak signal to the effective noise voltage. (4) The Barstow-Christopher function (Ref. 2: Barstow J.M. and Christopher H., The Measurement of Random Monochrome Video Interference, Transaction of the AIEE, 1953, 72, P. 1; Communication and Electronics, 1954, 1, 735-741), which evaluates the noise visibility, is not suitable for solving the problems of the effect of noise spectral composition on the TV system

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On the effect of noise ....

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resolution and upon the discrimination of picture details at high noise levels commensurable with, or exceeding, the useful signal. There are 6 figures and 9 references: 6 Soviet-bloc and 3 non-Soviet-bloc references. The two references to the English-language publications read as follows: Schade O., Image Gradation, Graininess and Sharpness in Television and Motion-Picture Systems, P. III, JSMPTE, 1953, 2, 97-763; Barstow J.M. and Christopher H., The Measurement of Random Monochrome Video Interference, Transaction of the AIEE, 1953, 72, P. 1; Communication and Electronics, 1954, 1, 735-741.

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Card 5/6

POLONIK, Vladimir Stepanovich; SAPRYKIN, K.V., retsenzent; SOKOLOV,  
V.I., red.; SOBOLEVA, Ye.M., tekhn. red.

[Applied television] Prikladnoe televidenie. Moskva, Gosenergo-  
izdat, 1962. 156 p. (MIRA 15:12)  
(Television in science) (Industrial television)

SOLOLOV, V.I.

Conical refining engine with pulp movement from the large to the small  
diameter of the cone. Bam.prom. 28 no.11:30 N '53. (MIRA 6:11)  
(Wood-pulp industry)

SOLOV, V.I.; BOBROVSKAYA, N., redaktor; LOMILINA, L. tekhnicheskiy  
redaktor.

[Wood carving in bas-relief] Ploskorel'efnaya rez'ba po derevu.  
Izd. 3-e, perer. i dop. Leningrad, KOIZ, 1955 82 p. (MLRA 8:7)  
(Wood carving)

88426

S/056/60/039/006/011/063  
B006/B056

24.7900 (1147, 1158, 1160)

AUTHORS: Belov, K. P., Malevskaya, L. A., Sokolov, V. I.

TITLE: Resonance and Magnetic Properties of Garnet-type Yttrium Ferrites at Low Temperatures

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1960, Vol. 39, No. 6(12), pp. 1542-1547

TEXT: The authors investigated the temperature dependence of the anisotropy of the resonance field and the resonance line widths of single- and polycrystalline yttrium ferrite specimens ( $3Y_2O_3 \cdot 5Fe_2O_3$ ) with garnet structure in the temperature range 2 - 300°K. At the same time, line widths and magnetization curves in static fields were measured on polycrystalline specimens. The ferromagnetic resonance was investigated at 8500 Mc/sec. For the temperature measurement, a copper constantan thermocouple was used. The crystals were grown by V. A. Timofeyeva at the Institut kristallografi AN SSSR (Institute of Crystallography of the AS USSR). Fig. 3 shows the measured temperature dependence of the resonance field for polycrystalline (1) and monocrystalline specimens (2). The results obtained

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Resonance and Magnetic Properties of Garnet-  
type Yttrium Ferrites at Low Temperatures S/056/60/039/006/011/063  
B006/B056

by measuring the resonance field strength in dependence of the direction relative to the crystallographic axes in the (110)-plane (in which all main axes were located) are for  $T = 300, 77, 20, \text{ and } 2.0^\circ \text{K}$  in the four diagrams shown in Fig. 2. Measurements of the temperature dependence of the ferromagnetic resonance absorption line widths showed that the ferromagnetic resonance absorption in yttrium ferrite garnets shows practically no anisotropy, not only at room temperature, but also at helium temperatures. The line width  $\Delta H$  increases with decreasing temperature, where single crystals between  $20$  and  $40^\circ \text{K}$  have steep maxima. At  $40^\circ \text{K}$  the line width is more than 15 times as great as at room temperature. Polycrystalline specimens have a much lower and broader maximum ( $4 - 60^\circ \text{K}$ ). The results obtained are compared with those obtained by Dillon, Spencer, Kittel et al. As a measurement of the static magnetization curves showed, magnetic viscosity is large in the temperature range of the line width maxima. The authors thank Professor A. I. Shal'nikov for his interest and advice and V. A. Timofeyeva for placing single crystals at their disposal. There are 6 figures, 1 table, and 4 references: 1 Soviet and 3 US.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

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BELOV, K.P.; BELOV, V.F.; MALEVSKAYA, L.A.; PED'KO, A.V.; SOKOLOV, V.I.

Anomalies of temperature dependence of the line width of ferromagnetic resonance absorption in ferrates. Fiz. met. i metalloved. 12 no.5:636-643 N '61. (MIRA 14:12)

1. Institut kristallografii AN SSSR i Fizicheskii fakul'tet  
Moskovskogo gosudarstvennogo universiteta.  
(Ferrates)  
(Ferromagnetic resonance)

SOKOLOV, V.I., doktor tekhn.nauk, prof.; KAPUSTIN, I.I., doktor  
tekhn. nauk, prof., retsenzent; SVERDLOV, A.I., kand.  
tekhn. nauk, red.; KARGANOV, V.G., inzh., red.;  
EL'KIND, V.D., tekhn. red.

[Fundamentals of the design and construction of parts and  
units of food machinery] Osnovy rascheta i konstruirova-  
niia detalei i uzlov pishchevogo oborudovaniia. Moskva,  
Mashgiz, 1963. 315 p. (MIRA 17:3)

ACCESSION NR AM4021936

BOOK EXPLOITATION

S/

Pugachev, V. S.; Kazakov, I. YE.; Gluskov, D. I.; YEvlanov, L. G.;  
Mal'chikov, S. V.; Mishakov, A. F.; Sedov, V. D.; Sokolov, V. I.

Principles of automatic control (Osnovy avtomaticheskogo upravleniya), Moscow,  
Fizmatgiz, 1963, 646 p. illus., biblio., index. 15,000 copies printed.

TOPIC TAGS: automation, automatic control, linear control system, nonlinear  
control system

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SUB CODE: CP

SUBMITTED: 26Jul63

NR REF SOV:061

OTHER: 011

DATE ACQ: 27Dec63

Card 2/2

AM1037980

BOOK EXPLOITATION

s/

Nikolenko, Leonid Konstantinovich; Sokolov, Vsevolod Ivanovich

Manual for assemblers of gas turbine engines (Posobiye dlya slesarya-sborshchika gazoturbinnnykh dvigateley), Moscow, Oborongiz, 1963, 262 p. illus., biblio. Errata slip inserted. 4,500 copies printed. Textbook for production workers. Series note: Bibliotekha rabochego aviatsionnoy promyshlennosti.

TOPIC TAGS: propulsion, turbojet engine, turboprop engine, gas turbine engine, engine construction

PURPOSE AND COVERAGE: The book describes the assembly of turbojet and turboprop engines and special tools, attachments, and equipment used in assembling aviation gas turbine engines. The authors assumed that the reader for which this book is intended is familiar with the mechanic specialty and therefore the general mechanical problems are not treated in this book. The book is a textbook for improving the qualifications of mechanics-assemblers of gas turbine engines.

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SUBMITTED: 07Sep63

NR REF SOV: 004

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DATE ACQ: 16Apr64

Cord 2/2

SOKOLOV, V.I.

Determination of the internal resistance of a rail. Trudy OMIIT  
36:25-35 '62. (MIRA 17:4)

25

SOKOLOV, V.K.  
B

\*590. Critical Speeds of Ultra-Centrifugals. V. K. Sokolov.  
*Engineering Digest* (American edition), v. 4, May  
1947, p. 241-242. Translated and condensed from  
*Journal of Technical Physics* (U.S.S.R.), v. 16,  
1946, p. 463-468.  
Theoretical analysis clarifies the influence of rotor  
clearance, friction coefficient, and rotor unbalance  
upon the critical speed.

ASHRAE METEOROLOGICAL LITERATURE CLASSIFICATION



SOLOV, V.K.

Category : USSR/Electronics - Cathode Ray Tubes

H-6

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4304

Author : Artem'ev, N.L., Sokolov, V.K., Temiryazeva, S.K.

Title : Television Transmitting Tube with Photoresistance

Orig Pub : Radiotekhnika i elektronika, 1956, 1, No 2, 245-252

Abstract : Description of the arrangement, of the principle of operation, and of the characteristics of a transmitting television tube with photoresistance (vidicon) -- LI-18, operating with fast electrons. The procedure is analyzed for the choice of the operating conditions so as to insure optimum parameters. Bibliography, 8 titles.

Card : 1/1

SOV/112-59-4-7784

Investigating the Persistence of TV Camera Tubes Having Photoconducting Targets in the switching beam. Illumination has an effect on the persistence only within 0-20 lx. Variation of signal-plate voltage has a very pronounced effect; the value of this voltage between 10 and 60 v should be considered as the optimum (the voltage is measured with respect to the anode for fast electrons and with respect to the cathode for slow electrons). Target material has an effect on the persistence; LI18 tubes with the target from  $Sb_2S_3$  have a higher persistence than tubes with Se target. To reduce this persistence, it is recommended that the time constant of the target material be cut, the target working voltage be lowered, the beam current be raised, and the secondary-emission coefficient for the target be increased.

I.K.M.

Card 2/2

ACCESSION NR: AP4040469

S/0226/64/000/003/0029/0031

AUTHOR: Kuzub, V. S.; Gru, B. A.; Sokolov, V. K.

TITLE: Obtaining lead powder by cementation

SOURCE: Poroshkovaya metallurgiya, no. 3 (21), 1964, 29-31

TOPIC TAGS: lead, lead powder, lead powder manufacture, lead cementation, lead powder cementation

ABSTRACT: A process for obtaining lead powder by cementation on copper or its alloys in an aqueous solution of thiourea, lead nitrate, and organic (tartaric or citric) acid has been developed. Satisfactory results were obtained with an aqueous solution of 5—8 g/dm<sup>3</sup> lead nitrate, 38—42 g/dm<sup>3</sup> thiourea, 20—30 g/dm<sup>3</sup> tartaric acid, and 1.8—2.2 pH at 19—25C. Copper or brass submerged for 1 hr were covered with a solid layer of lead 1 μ thick. With prolonged cementation the layer became loose. The powder contained 90—96% lead and 0.2—2.6% sulfur. The average particle size was 50—70 μ and the bulk density was 28 g/cm<sup>3</sup>. Changes in the concentration of citric acid from 5 to 30 g/dm<sup>3</sup> and lead nitrate from 1 to 5 g/dm<sup>3</sup> had no effect on the emf.

Card 1/2

ACCESSION NR: AP4040469

Thiourea added in an amount of 10—35 g/dm<sup>3</sup> shifted the potential by more than 400 mv to negative values, thereby intensifying the process of cementation. Orig. art. has: 2 figures.

ASSOCIATION: Lisichanskiy filial GIAP (Lisichanskiy branch GIAP)

SUBMITTED: 27Aug63

ENCL: 00

SUB CODE: MM

NO REF SOV: 011

OTHER: 001

Card 2/2

SOLOLOV, V.K., inzh.

Reconstruction and renovation of apartment houses in Western  
Europe. Gor. khoz. Mosk. 32 no.8:37-39 Ag '58. (MIRA 11:9)  
(Europe, Western--Apartment houses)

SOKOLOV, V.K., inzh.; KHANIN, G.F., nauchnyy red.; BOTOVA, Yu.P., red.  
vypuska

[Reconstruction of apartment houses; engineering problems in  
reconstructing large apartment houses] Rekonstruktsiia zhilykh  
zdanii; inzhenernye voprosy rekonstruktsii zhilykh kapital'nykh  
zdanii. Moskva, Izd-vo M-va kommun.khoz.RSFSR, 1960. 65 p.  
(MIRA 13:9)

(Apartment houses--Maintenance and repair)

SOKOLOV, V. K., Cand. Tech. Sci. (diss) "Engineering Problems of Reconstruction of Aboveground Sections of Existing Housing, Connected with Internal Remodeling," Moscow, 1961, 13 pp. (Moscow Civil Engr. Inst.) 200 copies (KL Supp 12-61, 274).

RUDENKO, Yu.N., kand. tekhn. nauk; SOKOLOV, V.K., inzh.; YASNIKOV,  
V.N., inzh.

Distribution of power reserves in an electric power system.  
Elek sta. 35 no.10:43-49 0'64. (MIRA 17:12)



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1964. Khim. Zvezd, URU, 5.1.1.; GOMOLOV, V.K.; GIVORONSKIY, P.F.  
polyacrylamide as a brightener in zinc plating. Vest.  
Khim. Nostr. 43 no.7:65-67 JI '65. (MIRA 18:10)

L 07146-67

ACC NR: AP7001034

SOURCE CODE: UR/0281/66/000/004/0099/0105

AUTHOR: Anisimova, N. D. (Moscow); Guseynov, A. M. (Moscow); Sokolov, V. K. <sup>28</sup>  
(Moscow) <sup>13</sup>

ORG: none

"Usage of Digital Computers for Calculation of Special Operating Modes of Electrical Systems"

Izv, Akad. Nauk. SSSR, Energetika i Transport, No 4, 66, pp 99-105

Abstract: An analysis of the possibility of using digital computers in investigating the stability of special operating modes. A method is described and a program is presented for calculation of areas of static stability on the "Ural-2" digital computer. An algorithm is presented for producing coefficients of the characteristic equation of the LaGrange interpolation formula. The method suggested is illustrated with experimental calculations. The program which is presented contains only four basic subroutines: 1) calculation of elements of the characteristic determinant for  $p = p_i$ , where  $i = 0, 1, 2, \dots, n$ ; 2) diagonalization and computation of the characteristic determinant for the same values of  $p_i$ ; 3) determination of the coefficients of the characteristic equation by the LaGrange interpolation formula; 4) computation of the elements of Roth's table and fixation of the state of the system or the form of disruption of stability. Orig. art. has: 2 figures and 9 formulas. [JPRS: 38,490]

Card 1/2

0924 0042

SOKOLOV, V. L. Cand. Geolog-Mineral Sci.

Dissertation: "Geological Structure and Petroleum-Bearing Possibilities of the Kerensk-Chembar Belt of Upheavals." Moscow Order of the Labor Red Banner Petroleum Inst. imeni Academician I. M. Gubkin. 23 Dec 47.

SO: Vechernyaya Moskva, Dec, 1947 (Project #17836)

3OKOLOV, V. L., All-Union Scientific Research Institute of Geophysics (VNIIGeofizika)

"Status and Further Development of Aerogeophysical Methods in the Petroleum Industry," paper presented at the All-Union Interdepartmental Conference on Aerial Surveying, Leningrad, 25-Nov-1 Dec 1956.

SUM: 1391

50KULOV, V.L.

807/35-2  
30/7-8-3

PLANE 1 BOX KRYVYDZIN

Abdumajit mash 8388. Laboratoriya aeromagnitnykh

Trudy, tom 8: Materialy VII Vsesoyuznogo nauchnoissledovatel'skogo sovetskikh nauchnykh i tekhnicheskikh seminarov po aeromagnitnoy razvedke. (Materials of the 7th All-Union International Conference on Aerial Surveying, 25 November-1 December 1956) Moscow, Gosgeolizdat, 1959. 300 p. 5,000 copies printed.

Ed. of Publishing House: V. G. Filatov; Tech. Ed.: O. A. Gureva; Editorial Commission: M. O. Kall, Corresponding Member, Academy of Sciences, USSR; A. A. Logachev, V. P. Mironchuk (Serp. Ed.), and M. N. Sokolov.

PURPOSE: This publication is intended for photogeometrists, geologists, geographers, and other scientific and technical personnel concerned with aerial photography.

COVERAGE: This issue of the Transactions of the Laboratory of Aerial Survey Methods contains the second part of materials presented at the 7th All-Union International Conference on Aerial Surveying, which took place in Leningrad, November 25 through December 1, 1956. Articles treat problems dealing with the examination and application of aerial survey methods in geological, geomorphological, and geophysical investigations. Special attention is directed to aerial survey methods in geological and geomorphological mapping and geophysical work under different conditions. The techniques of joint airborne magnetic prospecting and aerial photography are described. References accompany individual articles.

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Pal'teyn, M. D., G. M. Dreyer, and A. A. Sibirskiy [Laboratory of Aerial Survey Methods, Academy of Sciences, USSR]. An Integrated (Combined) Use of Aerial Photography and Aerogeophysical Prospecting in Geological Explorations	298

AVAILABLE: Library of Congress

Card 10/10

AC/Am/ee  
7-28-60

BOKSERMAN, Yu.I.; BORISOV, A.A.; BROD, I.O.; VASIL'YEV, V.G.; YELIN, N.D.;  
YEROFEYEV, N.S.; KUDRYASHOVA, N.M.; L'VOV, M.S.; MIRCHINK, M.F.;  
MUHATOVA, A.T.; NEVOLIN, N.V.; SOKOLOV, V.L.; TROPIMUK, A.A.;  
YERSHCV, P.R., vedushchiy red.; TROPIMOV, A.V., tekhn.red.

[Gas resources of the U.S.S.R.] Gazovye resursy SSSR. Moskva,  
Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1959.  
350 p. (MIRA 12:8)

(Gas, Natural)

BUYALOV, N.I.; VASIL'YEV, V.G.; YELIN, N.D.; YEROFEYEV, N.S.;  
L'VOV, M.S.; KLESHCHEV, A.I.; KUDRYASHOVA, N.M.; SOKOLOV, V.L.

Method for evaluating natural gas and petroleum resources. Geol.  
nefti i gaza 5 no. 1:14-18 Ja '61. (MIRA 14:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gaza i  
iskusstvennogo zhidkogo topliva (for Vasil'yev, Yelin,  
Yerofeyev L'vov, Kudryashova, Sokolov). 2. Vsesoyuznyy nauchno-  
issledovatel'skiy geologo-razvedochnyy neftyanoy institut  
(for Buyalov, Lkeshchev). (Gas, Natural-Geology)  
(Petroleum geology)



TUMANOV, Petr Aleksandrovich; SOKOLOV, V.L., otv. red.; KISEL'MAN, G.S.,  
red. izd-va; YEGOROVA, N.F., tekhn. red.

[Oil potential of Middle Devonian sediments in the northeastern  
slope of the southern Timan Ridge] Neftegazonosnost' srednedevon-  
skikh otlozhenii severo-vostochnogo sklona IUzhnogo Timana. Moskva,  
Izd-vo Akad.nauk SSSR, 1962. 87 p. — Diagrams 1-6, 8-9, 17-18.  
(MIRA 15:7)

(Timan Ridge—Petroleum geology)  
(Pechora Valley—Petroleum geology)

ADAM'YEV, V.G.; YELIN, I.D.; YEROFEEV, K.S.; SOKOLOV, V.L.

Results of gas prospecting for the first three years  
of the seven-year plan. Geol. nefti i gaza 6 no.6:1-4  
(MIRA 15:6)  
62 '62.

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnykh  
gazov.

(Gas, Natural--Geology)

YEROFEYEV, N.S.; KOZLENKO, S.P.; SOKOLOV, V.L.

Marginal ledge of the Caspian Lowland is the chief area of gas prospecting in the trans-Volga portion of Saratov and Volgograd Provinces. Geol. nefti, i gaza 6 no.7:9-14 JI '62. (MIRA 15:6)

1. Glavnoye upravleniye gazovoy promyshlennosti SSSR i Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnkh gazov.

(Saratov Province--Gas, Natural--Geology)  
(Volgograd Province--Gas, Natural--Geology)

